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Report of the United Nations Development Programme on statistics of human development

Note by the Secretary-General

In accordance with a request of the Statistical Commission at its forty-first session (see E/2010/24, chap. I.B, decision 41/112), the Secretary-General has the honour to transmit to the Commission the report of the Human Development Report Office of the United Nations Development Programme. The Commission is invited to consider the specific points raised in the conclusions of the report (sect. VII, paras. 47 and 48).

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Report of the United Nations Development Programme on statistics of human development

I. Introduction

1. The *Human Development Report*, human development indicators more generally, were previously discussed at the thirty-first (2000), thirty-second (2001), thirty-third (2002) and thirty-ninth (2008) sessions of the Statistical Commission. The present report is a follow-up to those earlier discussions, pursuant to a request of the Commission at its forty-first session (see E/2010/24, chap. I.B, decision 41/112). It provides background to the human development report, some details about measurement innovations introduced in the 2010 *Report*, and some preliminary thinking about the 2011 *Report*.

II. Background

2. The human development report is an independent report commissioned by the United Nations Development Programme (UNDP). Since it was first introduced in 1990, the report has pushed the frontiers of development thinking, based on the message that people should be at the centre of all development endeavours. Each year, the report analyses a critical development theme from the human development perspective. The reports also contain a statistical annex of the latest human development indicators, some of which are combined in composite indices. The Human Development Index, which measures basic human development in three dimensions — longevity, knowledge and a decent standard of living — embodies the idea that human development is broader than economic growth. The Index has been the hallmark of the human development report and a major factor in its continuing success.

3. In addition to the annual global human development report, over 700 national and regional human development reports have been produced in over 140 countries since 1992, prepared by regional and national teams of experts using the data and statistics available from national statistical offices, often with the support of local UNDP country offices but, like the global reports, independently from UNDP.

4. The Human Development Report Office offers a rich Internet presentation of the 2010 *Human Development Report* with corresponding documents, background research papers, answers to frequently asked questions, country notes and a wealth of downloadable related statistical information. A tool for visualization of the trends in basic indicators is also available. The most prominent new tool, however, is version 2.0 of the Human Development Index, which allows users to build their own development index by selecting indicators, organizing them into dimensions and defining their own weights. This is a powerful research tool that enables students, researchers and practitioners to explore different possibilities for combining indicators into composite indices and thus broadens the debate on the measurement of human development.

III. Consultations around the 2010 *Human Development Report*

5. Over the past two years, the Human Development Report Office has held an extensive series of consultations with a wide range of experts, including official statisticians and statisticians from academia, as the ideas for the revised Human Development Index were developed and the new human development measures were introduced in the 2010 *Human Development Report*. A total of 34 regional and thematic consultations were held around the world.[1] The Office has ensured that the academic advisory panel for the report includes statisticians and other members with strong quantitative backgrounds. During the course of the preparation of the 2010 *Report*, two advisory panel consultations were held.

6. In March 2010, a rich and constructive review took place when the Statistical Commission expert group on the Human Development Index met with the Human Development Report Office, and came up with a list of recommendations and conclusions that were broadly supportive of the approach laid out by the Office (see E/CN.3/2011/14, annex). Since that review, minor adjustments have been made to the calculation of the Human Development Index, as well as the calculation of the new measures for the sake of consistency.

IV. Revisions to the Human Development Index

7. Since it was first introduced in 1990, the Human Development Index has attracted the attention of Governments, civil society organizations, researchers, the media and the general public around the world. It is widely regarded as the main alternative to measures based solely on income. At the same time however, the Index has been subject to a range of criticisms, on issues ranging from methods of index construction to the proxy indicators used to measure each dimension.

8. The Human Development Report Office used the twentieth anniversary of the Human Development Index as an opportunity to revisit past criticisms of the human development measures and improve the measures based on advances in the availability of quality data with reasonable country coverage. These revisions also took account of major recent reviews of the measurement of well-being including the report of the Commission on the Measurement of Economic Performance and Social Progress[2] and in *Beyond GDP: measuring progress, true wealth, and the well-being of nations*.[3] It should be noted that the changes introduced in 2010 are not the first revisions made to the Index — indeed there were major revisions, including the introduction of mean years of schooling as an additional measure of

[1] Between September 2008 and June 2010 34 consultations were held to help inform preparation of the 2010 *Report*, including in Brussels, Busan, Cambridge (United Kingdom), Cambridge (United States), Canberra, Geneva, Istanbul, Johannesburg, Lima, London, Melbourne, Nairobi, New Delhi, New York, Oxford, Paris, Rabat, Rio de Janeiro, Sydney and Washington, D.C., involving some 400 experts and practitioners, with the support of UNDP country and regional offices.

[2] J. Stiglitz, A. Sen and J.-P. Fitoussi, "Report by the Commission on the Measurement of Economic Performance and Social Progress". Available from www.stiglitz-sen-fitoussi.fr/en/index.htm.

[3] European Communities, *Beyond GDP: measuring progress, true wealth, and the well-being of nations: conference proceedings* (Luxembourg, Office for Official Publications of the European Communities, 2009).

knowledge in 1991, fixed goalposts in 1994 and the reintroduction of the logarithmically transformed and capped gross domestic product (GDP) in 1999. More details on the evolution of the Index are given in "Measurement of inequality in human development: a review".[4]

A. Measure of a decent standard of living

9. The decent standard of living component of the Human Development Index was traditionally measured by GDP per capita expressed in purchasing power parity (ppp) in terms of United States dollars. However, GDP is the monetary value of goods and services produced within the borders of a country irrespective of how much is retained in the country. The Human Development Report Office adopted one of the recommendations of the recent report of the Commission on the Measurement of Economic Performance and Social Progress[5] to replace GDP per capita with gross national income (GNI) per capita.

10. GNI expresses the income accrued to residents of a country, including international flows such as remittances and aid, and excluding income generated in the country but repatriated abroad. Thus, GNI is a more adequate proxy of a country's economic welfare than GDP.

B. Measure of knowledge

11. In recent years, the Human Development Index has measured knowledge using adult literacy rates and combined gross enrolment ratios. However, these indicators each have shortcomings. Literacy as a binary measure of knowledge is simple, but inadequate; furthermore the great progress observed in the world in terms of literacy increases has made this variable lose its capacity to differentiate among a large group of countries. The combined school enrolment ratio lacks the notion of duration of school attendance for the school age generations. These measures have been replaced with two new measures that take into account the actual and expected duration of schooling.

12. Mean years of schooling has replaced literacy rates for adults aged 25 years and older. Mean years of schooling is not always commensurate with the quality of education, but it is a better measure of a person's knowledge than adult literacy rates, which simply measure ability to read and write a short simple statement.

13. Expected years of schooling, defined as the number of years of schooling that a child of school entrance age can expect to receive, replaces the gross enrolment ratio in the Human Development Index. Higher life expectancies are associated with greater probability for children to spend more years in school, and higher overall retention within the education system. While this indicator is not without limitations (for example, it does not take into account years of repetition and therefore is not strictly comparable between countries with automatic promotion and those allowing grade repetition), it is a significant improvement over the gross enrolment ratio.

[4] M. Kovacevic, "Measurement of inequality in human development: a review", *Human Development Research* Paper No. 2010/35 (United Nations Development Programme, 2010).

C. Changes to methodology

14. Calculation of the Human Development Index requires transforming indicators with different units of measurement into indices with a non-unitary scale between zero and one. In the past, this was done using fixed maximum and minimum goalposts; for the calculation of the revised Index, the maximum values have been set to the actual observed maxima across countries in the time series 1980 to 2010. The minimum values are set as subsistence values, or "natural" zeros. Progress is thus measured against the minimum levels of standard of living, longevity and knowledge that a society needs to survive over time. The reforms that have been made to the Index are summarized in the table below.

Summary of 2010 reforms of the Human Development Index

	Previous			*2010*		
		Transformation			*Transformation*	
Dimensions	*Indicators*	*Minimum*	*Maximum*	*Indicators*	*Minimum*	*Maximum (observed values)*
Health	Life expectancy at birth (years)	25	85	Life expectancy at birth (years)	20	83.2
Knowledge	Adult literacy rate (percentage)	0	100	Expected years of schooling	0	20.6
	Combined gross enrolment ratio (percentage)	0	100	Mean years of schooling	0	13.2
Standard of living	GDP per capita (ppp US$)	100	40 000 (capped)	GNI per capita (ppp US$)	163	108 211
Aggregation	Arithmetic mean			Geometric mean		

15. The method of aggregation of dimension indices into the Human Development Index has also changed from taking the arithmetic mean to taking the geometric mean. The rationale is to reduce the extent to which a higher achievement in one dimension can be substituted for a lower achievement in another. Taking the geometric mean rewards more balanced achievements. Several research papers produced by the Human Development Report Office analyse statistical properties of the Index and its sensitivity to methodology decisions taken.[5] Technical details for calculating the Index using the new methodology and indicators can be found in the technical notes of the 2010 *Human Development Report* (pp. 216-222), which are also to be made available to the Statistical Commission in a conference room paper.

D. Data sources for the Human Development Index

16. The Human Development Report Office is a user of statistics and indicators rather than a data provider. The Office relies largely on other United Nations entities and international organizations to collect data from national authorities based on international definitions and standards, to verify and quality assure the raw data and to compile the statistics and indicators that are used ultimately in its reports. At the

[5] M. Kovacevic and G. Anguna, "Uncertainty and sensitivity analysis of the HDI", and F. Rodriguez and M. Kovacevic, "Refining the HDI", *Human Development Research Papers* (United Nations Development Programme, 2010).

same time, since an important role of the human development report is to push the boundaries of knowledge and innovation, this means that the Office has also made use of data series from alternative renowned sources where official statistics were not available or have not yet been developed. Important principles to which the Office adheres in data use include data reliability (figures that are implausible are not used) and public availability. The Office is very supportive of open access to data and has used this as a criterion for data use.

17. Life expectancy data used in the current Human Development Index calculation are from *World Population Prospects: the 2008 Revision*, a report that is prepared biennially by the Population Division of the Department of Economic and Social Affairs of the Secretariat using data from national vital registration systems, population censuses and surveys.

18. Education data on expected years of schooling are usually sourced from the Institute for Statistics of the United Nations Educational, Scientific and Cultural Organization (UNESCO).

19. The GNI per capita data used to calculate the Human Development Index are derived from World Bank GNI per capita (ppp US$) data. The latest available estimates were for 2008. To compute the 2009 and 2010 GNI estimates, GDP per capita growth rates estimated by the International Monetary Fund (IMF) were applied.

20. Regrettably, no international organization currently collects data on mean years of schooling. However, such data can be readily estimated using the education information contained in the UNESCO Institute for Statistics database. These estimates have been produced by Robert Barro of Harvard University and Jong-Wha Lee of the Asian Development Bank in 1993, 1996, 2000 and 2010.[6] Their estimates apply a uniform and transparent methodology to the base data contained in the Institute for Statistics database. The method has been validated by extensive academic discussion since its first publication in 1993 and is currently used regularly by growth and development economists around the world. It is also easily replicable using the information in the database. While the Human Development Report Office recognizes that it would be desirable for the final estimates of this variable to be produced by UNESCO, it considers the use of an internationally recognized source based on official statistics as the most reasonable alternative in the absence of an official database. The Office has initiated discussions with UNESCO regarding the possibility of producing an official UNESCO estimate of mean years of schooling in the future.

21. This is not the first time that the Human Development Index has used estimates that are not generated by a international organization. Starting in 1993, the human development reports used estimates of GDP per capita adjusted by the ppp produced by the University of Pennsylvania. This was because at that time no comparable international ppp-adjusted GDP estimates were produced by the international system. In 1996, the World Bank started producing official ppp-adjusted GDP estimates, which were incorporated into the human development report. This is an example of how the Human Development Index has helped to push the frontiers of data development.

[6] R. Barro and J-W. Lee, "A new data set of educational attainment in the world, 1950-2010", Working Paper No. 15902 (Cambridge, Massachusetts, National Bureau of Economic Research, 2010).

E. Human Development Index country coverage

22. Data availability determines Human Development Index country coverage. For the 2010 *Human Development Report*, a number of countries were missing data from international sources for one or more of the four Index components. For this reason, the Human Development Report Office was able to calculate the Index for only 169 countries and territories (168 States Members of the United Nations plus China, Hong Kong Special Administrative Region). The Federated States of Micronesia entered the Human Development Index table for the first time, while Zimbabwe re-entered the table. Antigua and Barbuda, Bhutan, Cuba, Dominica, Eritrea, Grenada, Lebanon, Oman, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Samoa, Seychelles and Vanuatu were dropped from the table because of missing data.

23. In the cases of Cuba, Iraq, the Marshall Islands and Palau, data are lacking on GNI per capita in United States dollar ppp from the primary data supplier (the World Bank). Purchasing power parity values are the estimated exchange rates that are used to equalize the purchasing powers of different currencies by eliminating differences in domestic price levels. Cuba, the Marshall Islands and Palau do not participate in the International Comparison Programme surveys from which ppp estimates are derived and Iraq lacks information about GDP for the past 10 years.

24. One other institution that provides income ppp estimates is the Center for International Comparisons of Production, Income and Prices at the University of Pennsylvania. For the few countries that do not participate in the International Comparison Programme, the Center produces estimates using a regression model that relies on data from the salaries of international civil servants converted using the official exchange rate. However, because the markets in which expatriates purchase goods and services tend to be unrepresentative of the rest of the economy, these data are a weak guide to the prices faced by people in practice. The Center recognizes this problem by grading their income estimates for Cuba and Iraq, for example, as "D" (the lowest reliability grade given to its estimates). Alternative estimation procedures might have included using the exchange rate faced by ordinary Cubans and Iraqis and the ppp conversion for economies with similar attributes, but this method goes against the principle of using a country's legally recognized exchange rate and prices to convert its national aggregates to an international currency. Another option could have been not to apply any ppp correction factor to the official exchange rate for convertible pesos and dinars. Both of these options produce estimates of far lower incomes than would have resulted using the ppp correction. The very wide variation in income estimates arising from these different techniques signals that there is not a single robust method to use in the absence of reliable data.

25. A number of countries are omitted from the 2010 Human Development Index calculations because of missing non-income data. Bhutan, Eritrea, Grenada, Lebanon, Oman, Saint Lucia, Saint Vincent and the Grenadines, Samoa and Vanuatu are not included because they are missing data on mean years of schooling. Dominica, Saint Kitts and Nevis and Seychelles are missing data on life expectancy and mean years of schooling; and Antigua and Barbuda lacks data on life expectancy, mean years of schooling and expected years of schooling.

26. The Human Development Report Office is actively looking for ways to improve country coverage for 2011 and beyond by working with the relevant international organizations and authorities.

V. Introduction of new indices

27. In the 2010 *Human Development Report*, three new measures were introduced: the inequality-adjusted Human Development Index, the gender inequality index and the multidimensional poverty index. These measures are introduced to complement the Human Development Index and address some of the limitations of the existing human development indices.

A. Inequality-adjusted Human Development Index

28. The Human Development Index is an average measure of a country's human development achievements. Like any other average measure, the Human Development Index does not account for the distribution of achievements in its component indicators across populations. The inequality-adjusted Human Development Index adjusts the Human Development Index for inequality in the distribution of each dimension. The measure is based on a distribution-sensitive class of composite indices proposed by Foster and others,[7] which draws on the Atkinson[8] family of inequality measures, and is detailed by Alkire and Foster.[9] The inequality-adjusted Index is computed as a geometric mean of geometric means, calculated across the population for each dimension separately. It accounts for inequalities in Human Development Index dimensions by "discounting" each dimension's average value by the level of inequality. The inequality-adjusted Index is equal to the Human Development Index when there is no inequality across people, but falls below the Human Development Index with rising inequality in the distribution across dimensions. The difference between the Human Development Index and the inequality-adjusted Index represents the loss in potential human development due to inequality, and can be expressed as a percentage.

29. The inequality-adjusted Human Development Index satisfies two desirable statistical properties. Firstly, the measure is consistent in the treatment of subgroups. This means that improvements or deteriorations in the distribution of human development within a certain group in society (while human development remains constant in the other groups) will be reflected in changes in the overall measure of human development. Secondly, the index is path independent, meaning that the order in which data are aggregated across individuals, or groups of individuals, and across dimensions yields the same result; there is no need for a particular sequence or a single data source. These properties allow for estimation of the inequality-adjusted Index by combining data from different sources for a large number of countries. Inequality in expected length of life is captured from the United Nations life tables, while inequality in education and income is estimated from nationally representative household surveys available from specialized international organizations (the World Bank, IMF, UNESCO, the United Nations Children's Fund

[7] J. Foster, L. López-Calva and M. Székely, "Measuring the distribution of human development: methodology and an application to Mexico", *Journal of Human Development and Capabilities*, vol. 6, No. 1 (2005), pp. 5-25.

[8] A. Atkinson, "On the measurement of inequality", *Journal of Economic Theory*, vol. 2, No. 3 (1970), pp. 244-263.

[9] S. Alkire and J. Foster, "Designing the inequality-adjusted Human Development Index (IHDI)", *Human Development Research* Paper No. 2010/28 (United Nations Development Programme, 2010).

(UNICEF), the World Health Organization (WHO), the Department of Economic and Social Affairs of the United Nations Secretariat, etc.). Details on the calculation of the inequality-adjusted Index are included in the conference room paper containing the technical notes of the 2010 *Human Development Report*.

B. Gender inequality index

30. The gender inequality index reflects gender differences in three dimensions: reproductive health, empowerment, and labour market engagement. The index shows the loss in these dimensions due to disparity between female and male achievements in the dimensions. It varies between zero, when women and men fare equally, and one, when one sex fares as poorly as possible in all three dimensions.

31. The gender inequality index is computed using the association-sensitive inequality measure suggested by Seth.[10] The index is based on the general mean of general means of different orders: the first aggregation is by the geometric mean across dimensions; these means, calculated separately for women and men, are then aggregated using the harmonic mean across genders. Using the harmonic mean of geometric means within groups captures the inequality between women and men and adjusts for association between dimensions, that is, it also accounts for the overlapping deprivations across dimensions of a gender. Issues related to gender disparities and the gender inequality index are thoroughly reviewed in Klugman and other.[11] Details on the gender inequality index calculation are included in the conference room paper containing the technical notes of the 2010 *Human Development Report*.

32. The gender inequality index replaces the two gender measures used since 1995: the gender related development index, which adjusts the Human Development Index for gender inequalities in each dimension; and the gender empowerment measure, which measures equity between the sexes in political and economic participation and in decision-making power. The measures have been criticized for both conceptual and methodological flaws.

C. Multidimensional poverty index

33. The human poverty index, introduced in 1997, measured multiple deprivations in some key aspects of human development. However, the human poverty index suffers a fundamental flaw that reduces its policy relevance: the measure cannot be linked to specific subgroups of people who are deprived in multiple dimensions because it aggregates average deprivation levels for each dimension. In other words, a country's human poverty index value includes those individuals deprived in all the dimensions, as well as those deprived in only one or two dimensions. To address this problem, the Human Development Report Office collaborated with the Oxford Poverty and Human Development Initiative to construct a multidimensional poverty index and the associated poverty headcount and intensity of deprivation measure.

[10] S. Seth, "Inequality, interactions, and human development", *Journal of Human Development and Capabilities*, vol. 10, No. 3 (2009), pp. 375-396.

[11] J. Klugman and others, "Measuring key disparities in human development: the gender inequality index", Human Development Research Paper (United Nations Development Programme, 2010).

34. The multidimensional poverty index identifies those individuals that suffer multiple deprivations in the same dimensions as the Human Development Index: education, health and living standards. It uses microdata from nationally representative household surveys available from specialized international organizations (the UNICEF Multiple Indicator Cluster Survey, the United States Agency for International Development Demographic and Health Survey, the WHO World Health Survey and the World Bank Living Standard Measurement Survey).

35. The education dimension consists of two indicators of deprivation: not having any household member who has completed five years of schooling; and having at least one school-age child (up to grade 8) who is not attending school. The deprivation in health dimension is measured by two indicators: having at least one household member who is malnourished; and having had one or more children die in the household. The standard of living deprivations are expressed by five indicators: not having electricity; not having access to clean drinking water; not having access to adequate sanitation; using "dirty" cooking fuel (dung, wood or charcoal); having a home with a dirt floor; and not having certain assets. The three dimensions are equally weighted and the multiple indicators within dimensions are also equally weighted.

36. To identify the multidimensionally poor, deprivation scores (the maximum score for each of the three dimensions is 3.33 for a total maximum deprivation score of 10) for each of the three dimensions are summed to obtain the household deprivation score. The cut-off for a household and its members to be classified as multidimensionally poor is a deprivation score of 3.

37. There are three multidimensional poverty measures: the headcount ratio or the multidimensional poverty rate, which is the number of individuals who suffer multiple deprivations in at least one third of the weighted indicators, divided by the total population and expressed as a percentage; the intensity or breadth of deprivation, which is the average number of weighted indicators in which the multidimensional poor are deprived; and the multidimensional poverty index itself, which reflects both the prevalence of multidimensional deprivation and its intensity. A good review of strengths and limitations of the method is given in Alkire.[12] Details on the calculation are included in the conference room paper containing the technical notes of the 2010 *Human Development Report*.

D. Data sources for the new indices

38. Two of the new experimental composite indices that capture inequality and poverty, introduced this year, rely on microdata available from internationally harmonized nationally representative household surveys. These powerful indices also promote the need for new, internationally comparable, statistical series. A key recommendation arising from the 2010 *Human Development Report* is the need to develop new data series and to encourage countries to extend the range and type of data available, especially through regular household surveys.

39. Data used to calculate the inequality-adjusted Human Development Index are from various sources. To assess inequality in the distribution of mean years of

[12] S. Alkire, "Multidimensional poverty and its discontents", *working paper* (Oxford Poverty and Human Development Initiative, 2010).

schooling and income, microdata from household surveys were used. These surveys were those harmonized in international databases such as the Organization for Economic Cooperation and Development Luxembourg Income Study, the Eurostat European Union Statistics on Income and Living Conditions, the World Bank International Income Distribution Database, the UNICEF Multiple Indicator Cluster Survey, the MEASURE DHS Demographic and Health Surveys, the WHO World Health Survey and the United Nations University World Income Inequality Database. To calculate inequality in the distribution of life expectancy at birth, data from the abridged life tables produced by the Population Division of the Department of Economic and Social Affairs were used. This distribution is available across age intervals (0-1, 1-5, 5-10 and up to 85+), with the mortality rates and average age at death specified for each interval.

40. Gender inequality index calculations rely on women's reproductive health data from the UNICEF publication *State of the World's Children* and the United Nations publication *World Population Prospects: the 2008 Revision*. Data on education attainment by gender are taken from Barro and Lee.[13] The shares of parliamentary seats held by males and females are from the Inter-Parliamentary Union publication *Women in Parliaments: World and Regional Averages*. Finally, labour force participation rates for males and females are obtained from the International Labour Organization LABORSTA database.

41. The multidimensional poverty index is calculated using microdata from various nationally representative household surveys conducted between 2000 and 2008 and available in international harmonized databases (MEASURE DHS, Demographic and Health Surveys, UNICEF Multiple Indicator Cluster Survey, and WHO World Health Survey).

42. The major limitation of the new indices comes from the microdata, which are sparsely available in internationally harmonized databases. They cover different years for different countries ranging over the period of 15 years. The most recent surveys that are available for some countries are from 2007, but there are still many countries for which the latest available microdata refer to years before 2000. Even if poverty and inequality do not change rapidly over time, the differences in years limit the international comparability of the data. For this reason the Human Development Report Office has not ranked countries for the new indices, but rather simply reported a specific value, associated with the year in which the data are available.

VI. 2011 *Human Development Report*

43. The 2011 *Human Development Report* will deal with the challenges to human development that come from unsustainability. It will propose a broad framework for thinking about the major threats to future sustainability, based on empirical evidence about their relative importance, and explore what a human development lens can add to understanding the way in which these threats can impede future human development — and what can be done about it. Following the 2002 Johannesburg Declaration on Sustainable Development, it will classify these threats under three broad headings: environment, economic and social, which correspond to the

[13] Barro and Lee, "A new data set".

mutually reinforcing pillars of sustainable development identified in the Declaration.

44. The 2011 *Human Development Report* will focus on the way in which inequality and unsustainability mutually reinforce each other and threaten human development. It will argue that inequality and unsustainability are two sides of the same coin: inequitable access to resources by people today and by people belonging to different generations. It will argue that inequality, by concentrating the command of resources in very few hands, is often associated with a lack of accountability that leads to unsustainable outcomes.

45. On the measurement side, the 2011 *Human Development Report* will explore different alternative measures to capture the sustainability of human development. The 2010 *Human Development Report* already introduced a new table of sustainability indicators, which includes measures such as adjusted net savings, the ecological footprint and carbon dioxide emissions. The Human Development Report Office is considering the feasibility of a new measure of sustainability in human development. However, given the severity of measurement problems and difficulties in reaching consensus about technical and normative issues related to the measurement of sustainability, it is highly likely that the 2011 *Human Development Report* will continue to present a "dashboard" of indicators of sustainability and vulnerability.

46. In order to inform and support its work, the Human Development Report Office would like to suggest scheduling a meeting with the Statistical Commission expert group in March to discuss possible advances in measurement related to the 2011 *Human Development Report*.

VII. Conclusion

47. Just as the human development indices have been evolving over the years, the Human Development Report Office intends to refine these measures as more quality data become available. The Statistical Commission is invited to comment on the new measures and to advise on future directions for the measures.

48. A key recommendation arising from the report this year is the need to develop new data series and to encourage countries to extend the range and type of data available, especially through more regular internationally harmonized household surveys. The Human Development Report Office would welcome opportunities to work with the Statistical Commission to promote such developments.

49. In summary, the Human Development Report Office has responded to all the specific proposals of the expert group, especially to the concerns about using official statistical series, the minimal use of supplementary series (e.g., use of mean years of schooling from a reputed source), providing full transparency about the data sources and estimation procedures, conducting advance consultations with country experts on data issues and estimation methods, and extending the advisory panel with statistical experts comprising theoreticians and practitioners.